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ABSTRACT

The first of a two-part radio transcript on learning disabilities contains discussion on definitional problems, incidence figures, and problems with labeling. Opinions of well known educators (including J. Gallagher, S. Kirk, and M. Prostig), are cited along with statements of parents and teachers. (CL)

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Program No. 113:

"LEARNING DISABILITIES"
PART I

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schools!

Options in Education **TRANSCRIPT:**

Program No. 113:

"LEARNING DISABILITIES"
PART I
March 20, 1978

A co-production of
National Public Radio & the
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TABLE OF CONTENTS

	<u>PAGE</u>
INTRODUCTION	1-2
WHAT LEARNING DISABILITIES ARE NOT - Dr. James Gallagher, Director of the Frank Porter Graham Child Development Center	2-3
A STUDENT WITH A LEARNING DISABILITY - Teacher and student	3-4
DEFINITION OF THE TERM 'LEARNING DISABILITY' - Dr. Samuel Kirk, University of Arizona	4-5
A TEACHER TALKS ABOUT HER LEARNING DISABLED STUDENTS - Lois Mayes, teacher	5-6
DIFFICULTY IN DEFINING 'LEARNING DISABILITIES' - Dr. Sylvia Richardson, educator and medical doctor	6-7
A TEACHER TALKS ABOUT WORKING WITH THE READING DISABLED - Jackie Howarth, a language arts teacher at Wilson Junior High, Rochester, N.Y.	8
ESTIMATE OF THE TOTAL NUMBER OF LEARNING DISABLED CHILDREN IN SCHOOL - Dr. Samuel Kirk, University of Arizona	9
DISAGREEMENT OVER WHETHER THAT ESTIMATE IS CORRECT - Fred Crouch, teacher for dyslexic students at Duval Senior High School, Prince George's County, Maryland; Dr. Chester Poremba, head of the Psychology Department at Childrens' Hospital in Denver, Colorado	9-12
A PARENT TALKS ABOUT HER LEARNING DISABLED CHILD	12
CONFUSION OVER WHAT IS BEING ESTIMATED CAUSES DISAGREEMENT - Dr. James Gallagher, Director of the Frank Porter Graham Child Development Center	12-13
LEARNING DISABILITIES ARE A WHITE, MIDDLE CLASS DISEASE - Dr. Samuel Kirk of the University of Arizona	13
DR. FROSTIG TALKS ABOUT LEARNING DISABLED CHILDREN - Dr. Marianne Frostig, Frostig Center in California	14
THE PROBLEM WITH MEDICAL LABELING - Dr. Samuel Kirk, University of Arizona	14-15
THE THEORY THAT 'NEUROTIC' PARENTS CAUSE LEARNING DISABILITIES - Dr. Marianne Frostig, Frostig Center, California	15
WHAT IS AND WHAT IS NOT A LEARNING DISABILITY - Dr. Sylvia Richardson	15-16
CONCLUSION	16-18

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"LEARNING DISABILITIES"

PART I

CHILD: A...

CHILD: B...

CHILD: C...

MAN: D...

WOMAN: H...

MAN: I...

MAN: J...

CHILD: K...

MAN: L...

TEENAGER: M...

WOMAN: N...

WOMAN: O...

WOMAN: P...

MERROW: T-I-O-N-S -- options -- OPTIONS IN EDUCATION.
From the ABC's of pre-school to the alphabet soup
of government programs, this is OPTIONS IN EDUCATION.

* * *

HOWARTH: Now, sound it out. T-h...r.

STUDENT: Irr.

HOWARTH: Irrr. Now go to the next two sounds which says what? Thirrr...

STUDENT: Third.

HOWARTH: Thirrr...

STUDENT: Owed it. Thirrowed it.

HOWARTH: Ok, now explain that. Throoooo...

STUDENT: Throw it...throat.

HOWARTH: Where's it? C'mon.

STUDENT: Throat, throat.

HOWARTH: Throat, throat.

HOWARTH: One young man that you just heard read has a very difficult time separating the letters. Now, if we tried to read letters that are all jumbled together, we wouldn't read very well either. That's why I insist that he reads the sounds apart, and then put them together. He can do that if he's very careful. He has learned to read by configuration, which I'm totally against. Configuration is you read by the shape of the word. For example, a p goes down below letters. Well chances are he's going to say something like a puh. What happens if it's a g, or some other letter that goes below?

* * *

MERROW: That child is not a very good reader, in fact, a pretty poor one.

BLAIR: But why? Is he poorly trained, a slow learner, or perhaps just not very bright to begin with?

MERROW: Those are the obvious possibilities, but they're not the answer. He reads poorly because he has a learning disability.

* * *

MERROW: I'm John Merrow.

BLAIR: I'm Wendy Blair, and this week and next week too, we're going to be exploring the disturbing world of the learning disabled.

MERROW: We say "disturbing" for a couple of reasons. First, nobody really knows how many kids have learning disabilities.

BLAIR: Estimates range from half a million to ten million.

MERROW: And second, because there's lots of disagreement about what a learning disability is.

BLAIR: If you want a common sense definition, try this: A learning disabled child is one who seems bright and who learns most things, but who can't seem to learn in one subject area.

MERROW: Good in arithmetic, but a poor reader, for instance...

BLAIR: ...or vice versa.

MERROW: Forty years ago, these kids were called slow learners, or late bloomers, or maybe just unmotivated.

BLAIR: Or maybe mentally retarded.

MERROW: But in the early 1950's, the term "learning disability" took hold. It's the umbrella for a lot of specific problems: dyslexia, aphasia, minimal brain disfunction.

BLAIR: And today, schools may be grouping a lot of kids who have learning problems under that learning disability umbrella. That's another part of the controversy.

MERROW: Because not everyone who learns with difficulty is learning disabled.

BLAIR: And you're not learning disabled just because your sister is better at math, or because your father went to Harvard and you're just an average student.

* * *

MERROW: But let's go back to the beginning, and to a proper definition.

BLAIR: Dr. James Gallagher is Director of the Frank Porter Graham Child Development Center in North Carolina. Like a lot of experts, Gallagher finds it easier to define learning disabilities by explaining what they're not.

WHAT LEARNING DISABILITIES ARE NOT

GALLAGHER: It isn't mental retardation; it isn't emotional disturbance. Let me give you a back-breaking definition. This is the definition out of the National Advisory Committee on Handicapped Children: "Children with special learning disabilities exhibit a disorder in one or more of the basic psychological processes involving understanding or using spoken or written language." So it's a language problem. "These may be manifested in disorders of listening,

thinking, talking, reading, writing, spelling, or arithmetic. They include conditions that may be referred to as perceptual handicaps, brain injury, minimal brain disfunction, dyslexia, and so forth. They do not include learning problems due primarily to visual problems, hearing problems, or mental retardation, or emotional disturbance." So what you have are youngsters that have a special learning problem, but it cannot be identified through any of these other means. The learning disabilities youngster may very well test average or above average on measures of intellectual ability, but may have some special deficit, some special problem in the area of development that's keeping them from learning.

For example, they might have an auditory perceptual problem. And what that means is that they may hear sounds, but they cannot interpret them. And so, what they hear is noise. And, obviously, if you have problems with interpreting sounds in your environment, you're not going to do very well in school. And so that youngster needs very special kinds of exercises and programming in order to help develop those skills, or develop their other skills to a better level.

BLAIR: Dr. James Gallagher, Director of the Frank Porter Graham Child Development Center in North Carolina. He was interviewed for OPTIONS IN EDUCATION by Barbara Bernhard of station WUNC, Chapel Hill, North Carolina.

* * *

A STUDENT WITH A LEARNING DISABILITY

STUDENT: After this said the tiger, uh I should of shawl...

WOMAN: No. What's...

STUDENT: Shh, ah...what?

WOMAN: What's...saying?

STUDENT: Aaa.

WOMAN: Ok. What's sh say?

STUDENT: Ssshhh...elll.

WOMAN: Good, say it again.

STUDENT: Elll.

WOMAN: Put the sh on it.

STUDENT: Elsh...a...

WOMAN: Now, look up her at me....

STUDENT: Ssshh.

WOMAN: Short a says -- baby...

STUDENT: Aaa.

WOMAN: Aaa, don't say it so fast.

STUDENT: Shaaa.

WOMAN: Shaaa. Get in your mind. Shaaaaaaa.

STUDENT: Shaaaaaaaaa...Shell.

WOMAN: Good. Sssheell. Sssheell.

STUDENT: Shaaaall eat first, and play the flute later.

WOMAN: Ok. First, let me hear you read it all the way through from the beginning...

* * *

MERROW: With auditory perception problems, a child can't separate and understand the sounds around him, and he won't do well in school. Now, we can hear that that child has a problem. But at his school, teachers don't like to use labels. Cathy Lewis, station WXXI, Rochester, New York, gathered that material for OPTIONS IN EDUCATION.

BLAIR: But how does the parent or teacher know about the auditory perception problem? Well, detection often begins with the observation that the child isn't doing well in school.

MERROW: But lots of kids don't do well in school, and most of them are not learning disabled.

BLAIR: Dr. Samuel Kirk is one of the pioneers in the field. In fact, he's credited with coming up with the term "learning disability" in the first place, back in the early 1950's.

MERROW: Kirk now teaches at the University of Arizona. I asked him about the term, and about the confusion.

DEFINITION OF THE TERM 'LEARNING DISABILITY'

KIRK: It's a term that is kind of an umbrella term for many kinds of disabilities: reading, writing, spelling, arithmetic, visual/motor activity, language disorders, and so forth. That's why it's rather difficult to define. The learning disability has three characteristics, and I think I might clarify the field if I can tell you what these three are.

First, we consider a child as having a learning disability if there's a discrepancy, or a disparity between his ability and his achievement, or between developments of various kinds which may be called developmental disability. A child can understand language very well, and may not be able to talk. That's a discrepancy between what goes in and what goes out. So, we have many psychological developmental discrepancies at the pre-school level. At the school age level, we tend to detect them as a result of their inability to read, or to spell, or to do arithmetic. That's criterion one. The other criterion is that this retardation in reading, or arithmetic, or spelling, is not the result of some of the handicaps that we know, like deafness. If a child is deaf, he's going to have difficulty in school. If we can explain this retardation by deafness, blindness, mental retardation, or lack of opportunity to learn...

MERROW: Or even emotional disturbance?

KIRK: ...or even emotional disturbance, then that child is not learning disabled, and that's the confusion. The third criterion is that this child needs special education. Now, by "special" education, I mean that kind of education which is over and above what we give the ordinary child, something different, something extraordinary in addition to the regular.

MERROW: I'll bet there are a lot of people out there listening, and I think I'd number myself among them, who are a little bit skeptical about the whole thing. I come from a family of six kids. Suppose one of those kids, probably me, was a little slower than the others; wasn't doing as well as Jimmy, and Robby, and so on had done. Now, it's kind of convenient. They can say, "Well, ok, John here is learning disabled," and it gives me a little respectability; it upholds my parents' stature in the community because it's not, you know, they don't have to say that I'm just plain dumb.

KIRK: I think that's correct. I think you have the picture very well. That's one of the difficulties with learning disabilities. It presupposes that there's a kind of a disability not like mental retardation. Now, you are correct in that. Within the learning disability programs in the public schools, we have many children who are slow learners; we have many children who haven't had the opportunity; we have children who are just slightly retarded because they're unmotivated, and yet their parents want them to get all A's in school, and they like to call them learning disabled. So the field is quite confused because of these numerous variables that confound the field to the layman.

BLAIR: Dr. Samuel Kirk, of the University of Arizona, one of the pioneers in the field of learning disability.

MERROW: Kirk is known for his research and experimentation, but there have been thousands of regular classroom teachers who encounter learning disabilities without really knowing what they were.

BLAIR: Sure, they had kids who seemed bright, did well in most things, but couldn't do arithmetic say, or couldn't spell.

MERROW: Lois Mayes was one of those teachers, and one of the first in Missouri to study learning disabilities.

BLAIR: In fact, she began by reading articles and books by people like Samuel Kirk.

MERROW: She told me about the early days, and about some of her students.

A TEACHER TALKS ABOUT HER LEARNING DISABLED STUDENTS

MAYES: There was Gary, for example. He was an extremely hyperactive child, just as hyper as he could be. He tried to write jumping up and down; he sat on his knees; he crawled around under his chair, and seemed unable to really complete anything because of his inability to settle down and write. He was an excellent reader. He just loved to read, and he would read for hours at a time, and be an extremely...comprehending while he was reading, and was a good reader.

And then there was Hank. He had a very poor idea of the person's parts, let's say: what a person was; where his head was, his arms and his legs. When he drew his draw-a-man picture, he would think...people's features were all over the page. There would be something here, and something there, and something somewhere else. And he called these....I said, "What are they, Hank?" He said, "Well that's an arm over there, and you can see that's an eye, and this is his leg." But none of them were integrated, or....I wonder what people looked like to a child like that.

And then there was John. And this was a child who had an extreme communication problem, to the point where he was unable, as a young child, to communicate at all. He had both receptive and expressive language problems: that is, the language did not come in right; and naturally, since he couldn't process words, then it was very difficult for him to learn to talk. It took him a long time before he could talk. And then finally, when he was able to talk, he didn't understand all the words that he said, and he didn't understand the syntax and the order of words in a sentence so that they made sense.

MERROW: Now you just described the kids and the things they couldn't do. Did you know why they couldn't do these things?

MAYES: No. (Laughs) I really didn't. I knew that they were placed in that room because they had been tested, and that some expert had told me that these children were neurologically impaired.

MERROW: "Neurologically impaired." That's the brain model. I mean, there was something wrong, basically, back in the brain.

MAYES: Yes, that's what they said about these children. These children had been through clinics. They might also have said they were brain damaged. However, we thought that was a very damaging label, and we thought neurologically impaired might be more accurate. There was a great deal of argument about that time about the definition of learning disabilities. And...

MERROW: There still is.

MAYES: All they do is argue about it; it doesn't...and about brain damage, and what relationship there is. But, the clinics that sent these children to us felt that there was a physical basis for their problem. I did the best I could with the knowledge I had. (Laughs) And, actually, it seemed to work pretty well.

MERROW: Lois Mayes, one of the first teachers in Missouri to get training in working with learning disabled children.

BLAIR: She worked with those children on a one-to-one basis, and that's generally what's prescribed for learning disabled children.

MERROW: And that's fine if there aren't very many learning disabled kids. But if the specially trained teacher has 25 or 30, instead of five learning disabled children, then obviously there's less time for individual help.

BLAIR: Which brings us to the problem of definition.

MERROW: In a nutshell, should definite medical evidence, medical proof be required before a child is labeled learning disabled? Or should the categories be looser, the fences lower, so to speak?

BLAIR: Dr. Sylvia Richardson is an educator and a medical doctor, and she believes in the strict definition. But as she told John, there's a lot of disagreement.

DIFFICULTY IN DEFINING 'LEARNING DISABILITIES'

RICHARDSON: There are terms that are used differentially by different disciplines. For example, the term "minimal brain disfunction"...

MERROW: Some people won't use that at all.

RICHARDSON: That's correct. That's a term that is most likely to be used by a physician. Educators don't like it, rightfully, because it's not in the educational parlance. The educator thinks more in terms of specific learning disabilities; that's what he's dealing with. The physician is more likely to be asked by parents, or by teachers, to evaluate a child's activity level, his behavior, his attention if this seems to be the major problem, which many children with learning disabilities have -- attentional problems. I think it points up the fact that the children called LD are a very, very heterogeneous population. It's very simple, if you come to my office with a cough, and I lay on the stethoscope and get some chest films, I can diagnose pneumonia; I know how to treat it, and I can cure you. And it's very straightforward, very uncomplicated. And if I tell any other physician in the world that John has pneumonia, they'll know exactly what I mean. They may ask me: "Is it bilateral, or unilateral, or which side?" But they'll know what I'm talking about. Whereas, if you use the term minimal brain disfunction, or learning disability, or dyslexia, they want to know what do you mean by that? What are the child's symptoms? Learning disability characterized by what? Does he have problems in reading? Does he have problems in arithmetic? Does he have problems in spelling? Does he have problems with writing? These are all different kinds of learning disabilities.

MERROW: Aren't there people in LD who would say, "Oh, there is something physical there. The two halves of the brain are not developed at the same rate, and there's a bilateral split somehow, and so there's that jump. And, therefore, what you need really is to work in vestibular functions of the brain, not... nothing in the classroom especially, but really occupational therapy?"

RICHARDSON: Well now, you see, you've mixed up three different disciplines.

MERROW: I'll believe that.

RICHARDSON: (Laughs)

MERROW: I am mixed up.

RICHARDSON: We've got a lot of good theory. You're talking about cause -- two different brain functions, two hemisphere functions -- and then you're talking about therapy for a cause. Well, the causes that you mention are possible but hypothetical at this point in time because we don't have that much knowledge. We can make conjectures; we can determine if there is a vestibular problem. And if there is a vestibular problem, and it's minor, then we will refer to occupational therapy.

If a child comes in with spasticity, tight muscles, and difficulty with gait and so on, and we also know...we can examine the child and say: "This child is neurologically impaired, damaged." And this is, let's say, it's a spastic cerebral palsy, ok? We can make that diagnosis. Then we look for possible cause. We may or may not find it. Cause meaning, how or why or when did this happen. Now, in some cases, we get a history that tells us that this child was anoxic at the time of birth and barely survived. We can make the assumption then that there was some perinatal event that could have created the problem. Really, that's not terribly important; because what's important is that here you have a child with a physical problem; what are you going to do about it, and so you call in for help.

Same thing really here. We can find that yes, there are children who show minimal neurologic problems. They're not severe enough to allow us to say, "Oh, this is a damaged child." The child's neurological system is not functioning properly; it's not integrated. And if we have available to us occupational therapy, therapists -- individuals who will work on sensory integration -- we might refer over there. We'll refer back to wherever, you know, to whoever seems to be necessary.

On the other hand, we also see other kinds of children who don't show anything like that.

MERROW: Dr. Sylvia Richardson of the University of Cincinnati. She's a physician, and she wants hard evidence of the causes of the problem. Parents, on the other hand, know there's a problem, and they want help.

BLAIR: So do teachers, of course.

MERROW: As Dr. Richardson said, there's a lot of theory, and there's also a lot of research going on. And maybe in a few years, we'll know more about how the brain works, and sometimes doesn't work.

BLAIR: There's another piece of the problem we've only hinted at, and that's treatment. Do you try to cure the problem itself, or do you help the child compensate for the problem: that is, strengthen other abilities?

MERROW: Say the child often spells words backwards, or in a jumble. Should you work on the basic principles of spelling in close tutoring?

BLAIR: Should you have the child memorize a list of the most common words and have him carry a pocket dictionary?

MERROW: Or, look for the neurological causes, and hope to correct the problem at its root?

BLAIR: Today, compensating is probably the usual solution, because the field is new, and not enough is known.

A TEACHER TALKS ABOUT WORKING WITH THE READING DISABLED

STUDENT: Shhhh.

HOWARTH: Right.

STUDENT: Ell...

HOWARTH: What's the A...say the A next.

STUDENT: Aa...O.

HOWARTH: Long or short A?

STUDENT: Shhaa.

HOWARTH: Long or short A.

STUDENT: Short.

HOWARTH: Good.

STUDENT: Shhhh.

HOWARTH: For example, if...to be very simple about it, if they're in seventh grade, and they're not reading as other seventh graders can read, reading three or four years below, yet they can do many other things that a normal child can do, average child can do, I think they're learning disabled. It's not life disabled. What I'm trying to do is remediate the things that he's in school so he can function better in real life, and not be handicapped in life because of his lack of reading. My goal is to get all my kids to sixth grade reading level so that they can function; cause you can function in the society with a sixth grade reading level.

LEWIS: Ok, but aren't there children in regular classes, children who are mainstreamed, who are also reading three and four years below their grade level? Why aren't they learning disabled?

HOWARTH: That's a good question. If a child is two or three years below his...what he should be reading, I would give them both special help. A child that's not having that many social problems in the classroom, who's not showing reversals and other obvious signs, who's not having trouble concentrating, and who's not having speech problems and hearing problems, I would leave in the classroom. Those kids that are having speech problems, hearing problems, other multiple problems, that also relates better to a small group and needs a little more security, I would put that kid in a special class.

LEWIS: But you'll admit that some of the reason why you get a child is, perhaps, because he cannot be handled in a regular classroom? So it's just, in effect, to get him out of that classroom.

HOWARTH: Yes, but...that's true. However, if you have a student...you have to look at the class as a whole, too. If you have a class of 25 students capable of learning, say, in the fifth grade, and you have two kids that are causing such disruption that they're interfering with everybody else. And the disruption itself is saying, "I need help"; that's what it's saying.

* * *

MERROW: Jackie Howarth, a language arts teacher at Wilson Junior High School in Rochester, New York, talking with Cathy Lewis of station WXXI. As Jackie Howarth made clear, it isn't easy to tell which kids are truly learning disabled. But we do hope that before this OPTIONS IN EDUCATION program is over, things will be a bit clearer.

BLAIR: And at the end of the program, we'll tell you how to get a transcript of this special look at the learning disabled.

* * *

MERROW: Reading disability and speech disability may not be, strictly speaking, learning disabilities, according to Dr. Samuel Kirk of the University of Arizona. Kirk believes that only 1 or 2% of school-age children are actually learning disabled.

ESTIMATE OF THE TOTAL NUMBER OF LEARNING DISABLED CHILDREN IN SCHOOL

KIRK: Now, learning disability overlaps with other areas: one, reading disabilities. Now, you have three levels of reading: developmental reading, corrective reading, and remedial reading. Remedial reading are the more severe cases that probably classify under learning disabilities. But there are 15, 20% of children in school have corrective reading problems. They may be in the fifth grade reading fourth; they may be in the sixth grade reading fifth. These we don't call learning disabled, but they do need help.

MERROW: How do you do it? How do you separate out? How do you identify the kids who really are learning disabled?

KIRK: Clinically I can do it. Abstractly I can't tell you over the radio how you differentiate these.

MERROW: But is there, is there neurological, is there physical evidence?

KIRK: I'd saying something like this. If I took a child that hasn't learned to read after two or three years of school, is a relative non-reader, or reads at the beginning of the first grade, I would try to test him to see whether he has another disability. And if I find that he has another disability beside the task of reading -- which is a target task...example is sound blending. I was examining an 18-year-old boy the other day in front of an audience in a correctional institution. This boy couldn't read a primer. He'd been in school for 10-15 years. And I said to him, "What is this word?" "Shhh-ooo." Now, he couldn't put those together and tell me it was shoe. "What's this?" "Mmm-ee." He couldn't put those together to tell....Now, a four-year-old kid can do that; a five year old....He had no auditory synthetic ability; couldn't put sounds together. Then I took him to a board, and I wrote a word on the board, and I said to him, "This word is cattle. Say cattle." He says, "Cattle." I says, "Look at it. It's cattle." Then I erased it. I said, "Write it." He put a C and an A, and then he couldn't go any farther. So I wrote it again, and then I said, "Look at it; it's cattle." I erased it, and I tried him four, five times. And he couldn't reproduce cattle. Now, I call that a visualization problem. I call this other auditory sense of the sound blending problem.

Now, you have a boy with these two disabilities: the inability to reproduce what he sees, and the inability to blend sounds. He is a learning disability. And if I teach him, I would have to teach him by developing these abilities in a reading situation.

MERROW: Kirk thinks that we label too many children learning disabled, and we often send them to specialists for problems that regular classroom teachers should be able to correct. The specialists, of course, disagree. Fred Crouch teaches social studies to dyslexic students at Duval Senior High School in Prince George's County, Maryland. He says that teachers who are not trained to detect the symptoms of dyslexia will often make wrong assumptions about why their students are poor readers and writers. Crouch spoke with Diane Rehm of station WAMU in Washington, D.C.

DISAGREEMENT OVER WHETHER THAT ESTIMATE IS CORRECT

CROUCH: The typical teacher will identify this child as lazy, or they will identify the child as, "Well he could really do it, but he just doesn't have the get-up-and-go, and he's not eating right," and these sort of explanations for poor achievement in the classroom. And it must be incredibly frustrating for these kids to sit in these classes and to realize that they probably know more

about what's going on, especially if it's in a lecture situation, or movies, or slides. And then to flunk the test, and see their peers, who know less than they they do, scoring grades that are much higher.

REHM: Are we talking primarily about boys?

CROUCH: We are primarily about boys. About 85% of the dyslexic students are boys. I believe that of the other specific learning-reading disabilities, the percentage is not 85% male; it's probably 60 or 70% male. But most of your dyslexic students are males. One interesting thing is a lot of these kids can remember lines from a movie that they saw two years ago, and literally memorize whole films, and books. And a lot of times, I think, this is why they aren't identified any earlier, is because they are so bright, and everybody assumes, "Well this is a bright child, and there's obviously nothing wrong with him." Because they assume that being dyslexic may be synonymous with having a low IQ, which is also a problem for our students. I think a lot of our students, after we identify them, have a real problem with their self-image. And that's one of the most important things, I believe, in my class, and certainly in all the classes, is for the teacher to continually remind the students and show them how bright that they are, and go over what dyslexia is, and what we're doing for them, and what they can do for themselves.

REHM: You know, are we talking about an increase in the number of these children, or are we simply talking about an increased ability to identify them?

CROUCH: Well, maybe there were as many dyslexic students in the past as there are now. But I believe in the past, the structured classroom helped them cope better with their problems, and also, the teaching of spelling and reading through phonetics and through syllabication; whereas in...recently, I think that our dyslexic students are coming out of the woodwork because of, maybe, new teaching methods, in which they just are not able to perform. They need a very structured classroom situation, or structured as one can offer. A lot of the new teaching techniques, which are maybe better for the children who aren't dyslexic, or certainly they can reach new heights with the new methods are not so good for the dyslexic kids.

MERROW: Fred Crouch, a teacher of students with dyslexia at Duval Senior High School in Maryland, speaking with Diane Rehm of station WAMU, Washington, D.C. As a person trained to detect learning disabilities, Crouch thinks the estimates of 1 or 2% are much too low. One person who agrees with him is Dr. Chester Poremba, head of the Department of Psychology at Childrens' Hospital in Denver, Colorado. He uses medical terminology to define learning disabilities, and thinks that if you combine the expertise of both teachers and physicians, the incidence of learning disabilities rises to 20% of all school-age children.

DR. CHESTER POREMBA

POREMBA: Let me tell you, I think that five years from now we'll be identifying LD by way of the laboratory. In other words, we're going to examine blood, and we're going to examine how the kid, or the person, processes blood, or other, you know, bodily functions, and that's going to be very much, you know, in the picture.

MERROW: As opposed to today?

POREMBA: Yes. Today, you see, we're kind of hung with all kinds of educational problems. Kids are in school. You know, that's where they are; that's where they function; that's where they don't function, and they're visible from that standpoint. And it's very interesting that the national definition of learning disabilities is related to grade placement versus age.

MERROW: And you're saying, five years from now it's going to be much more medical?

POREMBA: I think so. It had better be, because I think unless it is, I

think we're on the wrong track.

MERROW: You think the 20% figure will hold up once you get into a much more medically based definition?

POREMB: Oh, no, no question. In my own practice, for instance, I have one patient who's 38 years old, and this fellow can probably qualify for three different doctorate degrees, and, you know, he won't turn the corner, and he has dyslexia. And he has a tape recorder like you do, and when he goes to class, and so on, and he makes copious notes only he can understand. And he compensates very well. But in the process, he's become very suspicious of society, and people in it, and so on. And if he went to a mental health center, he'd be identified as a paranoid, a classic paranoid. And, you know, we've studied paranoia as a developmental process. And, you know, I've gotten to see paranoia, a classic paranoid, really develop out of some personal deficiencies that he's compensated for. And in the process...

MERROW: And that's not uncommon? I mean the LD then is followed by some kind of emotional...?

POREMB: Oh, I have never met an LD child, or adult, or anybody who didn't have also emotional problems. If they don't have emotional problems, I've come to the point that I'd better suspect, that I'm wondering what's going on. So that, you know, it sort of depends on where you go. We take kids to a mental health center, and they have emotional problems, and we're going to address those problems, you see, emotional problems, when in fact, the problems are, maybe, you know, processing of language, or academic, you know, kinds of problems; that if you took care of those, the kid would take care of his own... patient problems.

MERROW: You know, I think people listening to this might be very upset, particularly if they have kids. Most of the other people I've talked with, most of the literature I've looked at, estimates LD at a pretty low percentage - 2,3,4%. That's the... was in the federal expectation, and the legislation was a 2% level to be eligible for federal money. Now here you come along saying, "Oh, 20% maybe more." But the drift of your conversation implies to me, or I infer that you're really talking about learning problems, not necessarily learning disabilities.

POREMB: Well again...

MERROW: Do you care about the difference?

POREMB: Oh yes! You know, again it makes a difference, you know, how you, how you define the problem. And that 2% is very interesting. The point I'm trying to make, is they'll find as much disorder as they are funded to find. And this is in learning disabilities, or in blindness, or what have you.

BLAIR: Dr. Chester Poremba, of Children Hospital, Denver, Colorado.

MERROW: Dr. Poremba mentioned money, and that's not a digression. The new federal legislation, known either as P.L. 94-142, or the Education of All Handicapped Children Act, provides money, nearly a billion dollars to help pay to educate handicapped kids.

BLAIR: Some of that money can be used to help kids with learning disabilities. At first, the federal agency that administers the law put a ceiling on the number of learning disabled kids who could be helped: 2% of any state's school-age children.

MERROW: But now, the ceiling, or CAP has been removed, and each state may identify and claim funds for up to 12% of school-age children: that is, it doesn't matter what the handicap, as long as the total is no more than 12%.

BLAIR: Will the number of learning disabled kids increase as the money increases? Dr. Poremba thinks so, obviously.

MERROW: But, even though the federal government is putting up nearly one billion dollars, that's not all that much when you realize that there are several million handicapped children.

BLAIR: It's less than \$200 per child, and it costs a lot more than that to educate children with learning disabilities, or any other handicap.

MERROW: Dr. Poremba raised another issue: the emotional problems that usually accompany learning disabilities. Why? Because the child is frustrated and misunderstood, and often mis-diagnosed.

* * *

A PARENT TALKS ABOUT HER LEARNING DISABLED CHILD

PARENT: She is a beautiful girl. She had a lovely personality: outgoing, friendly; everybody likes her. She, you know, could have been a model. But, you know, just fell into a really terrible life, because she had to prove to people that she could make money, and there was no way of her doing that in a legitimate job because she just could not read or write.

COLVIN: To earn money, what, how does she take care of herself?

PARENT: She's a prostitute now. And that started when she was 14 years old. She, she went...she wanted tutoring, but never got to that point where she ever got any. She went to some type of schooling, where she would go to school a couple of weeks and work a couple of weeks. And there was a lot of pot smoking and different stuff on the job, and she didn't want to get into that at that point. So she dropped out of that. It was just, you know, it just seemed like there was no place for her to go, where she could get any help. But to me, it's, you know, this...like just a wasted life. Because she has a lot of potential -- she still does. I don't know. It's...you have to live with that kind of a situation every day, and see somebody really...knowing that they can't do something, and, and, and kind of, not knowing how to help themselves. And everybody feeling for them, but really not having any way to do anything about it. You know, everybody's so powerless to do anything to help. And she, she just wanted, you know, so much...She did want so much to read.

* * *

MERROW: Tom Colvin talked with that parent of a learning disabled child in Baltimore, Maryland.

BLAIR: Numbers, how many learning disabled children are there? You've heard estimates ranging from 1% to over 20%.

MERROW: Dr. James Gallagher of the Frank Porter Graham Child Development Center in North Carolina, explained the discrepancy to Barbara Bernhard.

CONFUSION OVER WHAT IS BEING ESTIMATED CAUSES DISAGREEMENT

GALLAGHER: It's a great sense of...source of contention in the field. And the estimates range anywhere from 1% to 20%. And, yes, and what that generally means is there's a disagreement as to how severe the case has to be before it calls...is called learning disabilities. Those that talk about 1% of the youngsters, they're talking about youngsters that have a severe deficit in one of these skill areas, and they're not really going to respond well to the school without very intensive remedial...special remedial work. When people talk about 20% of the youngsters being learning disabled, they're kind of grouping together all the youngsters that are having troubles learning from whatever cause in the schools. And it may be that they didn't get good instruction in the first grade in reading, and so now they're not able to read effectively, or maybe they're not highly motivated by circumstances in their family, or what have you, and so they're not learning. And so you bunch together all of the youngsters who are having trouble in the schools, and you call them all learning disabilities, and that will get you 20%. Or you take the milder versions of the more

severe case that we're talking about. And that you add those up, and you'll get a very substantial proportion of youngsters.

BERNHARD: Which area do you subscribe to in the 1 or 20% theory?

GALLAGHER: I lean towards the 1 or 2%.

BLAIR: Dr. James Gallagher of the Frank Porter Graham Child Development Center in North Carolina, talking with reporter Barbara Bernhard of member station WUNC, Chapel Hill, North Carolina.

MERROW: One charge that's often made about learning disabilities is that they're socially acceptable, white, middle class problems, and that black and poor children with the same symptoms get labeled educable mentally retarded. I asked Dr. Samuel Kirk of the University of Arizona about that labeling discrepancy.

LEARNING DISABILITIES ARE A WHITE, MIDDLE CLASS DISEASE

KIRK: We do know that many children in suburbia are called learning disabled, and are under programs of learning disabilities. And we do know that in the low socioeconomic areas, there aren't that many learning disabled with service. So what you're saying is correct. It's a middle class, white disease, if you want to call it that, too much. And we've objected to that. We've pointed out that this is not, that should not be. One legislator told me that in a city, 9% of a very rich area were in programs for the learning disabled, and in the lower socioeconomic area, it's only half a percent...were in the program for learning disabled. And that's what's wrong with this field. We have too many ambitious people trying to call people...children learning disabled when they are not.

MERROW: Why is that phenomenon? You know, why do people want to call children learning disabled?

KIRK: I'll give you a case. A man tapped at my door once with his wife at 8:00 in the evening, and said, "We hear you're a specialist in learning disabilities. We have a learning disabled child, and we'd like some advice." So, I invited them in. They had the school folders with them. I looked at the folders, and I found this boy was a junior in high school. He was getting C's and B's and D's in his school work, and he was reading, according to the test, about 10th, 11th grade, doing mathematics at that level. And I turned to the parents, and I said, "Why are you calling this boy a learning disabled child?" And they said to me, "We have put in an application to an elite college in the East, and they turned him down because his grades aren't good enough. And we thought that if we caught him now at the junior level, and worked with him, we could correct his learning disability so he will get A's and get into the junior college...into the elite college."

That's part of an answer to your question. That some people feel that their children should be on top of the class all the time. Now, everybody can't get A's, and everybody can't be on the top like that. Somebody's got to have to be in the middle, or even at the bottom, in every class, in some area. And so, we have that phenomena operating as learning disabilities.

BLAIR: Dr. Samuel Kirk of the University of Arizona. John talked to him at the annual meeting of the Association for Children with Learning Disabilities in Kansas City recently. That association itself is only 15 years old, another indication of how new the learning disability field is.

MERROW: Dr. Marianne Frostig is, like Kirk, another of the pioneers in the field. She started a special training facility, now called the Frostig Center in California, where she studied and treated children with learning disabilities.

BLAIR: But maybe special centers like hers provide a distorted picture. After all, the few kids who go to them get more attention, and more intensive help.

MERROW: I asked Dr. Frostig what happens to the children with learning disabilities who don't get special help, or who get a little, and then go back to the public schools?

DR. FROSTIG TALKS ABOUT LEARNING DISABLED CHILDREN

FROSTIG: I don't know. You know, I know that very many of the children whom we had said that public school afterwards was really terrible, because "they didn't help us anymore." They really felt abandoned, to a certain degree, when they came back to public school; but they, nevertheless, adjusted.

I do not believe that you can do your best with these children when you use any mechanical device like a computer to develop their program. One has to have a clinical approach; one has to have an individualized approach, in which one considers the feelings of the children, the way they work, the way...their cognitive style we call it. Not just what they can do and what they can't do. When we only know in what they failed, in what they can't do, and make a program on this basis; we don't know how they learn, and why they failed.

MERROW: The public school may not be able to do that kind of clinical, very close attention.

FROSTIG: I think that unfortunately the law which have now, the newest laws are in intent excellent. We should be very proud as American that we have a nation in which such laws are created, which, by the way, are now copied, or at least inspected by I think practically, nearly all nations in the world. But, we should also realize that that law will not work if we do not have the means to put it into effect. I think it is absolutely unjust to require people who are not specially trained, and who are without any additional necessary help, to do this kind of a job.

MERROW: Dr. Marianne Frostig of the Frostig Center for Children with Learning Disabilities in California.

BLAIR: Better trained teachers and more of them are needed, Frostig says.

MERROW: And personal attention. She's unhappy about computer diagnosis.

BLAIR: Dr. Samuel Kirk gets upset with all the different labels: dyslexia, aphasia, minimal brain disfunction.

THE PROBLEM WITH MEDICAL LABELING

KIRK: Personally, I don't like these terms. Because if I say he's dyslexic because he has a brain damage, and you say to me, "How do you know he has a brain damage?" And I'll say, "Because he hasn't learned to read." That is tautology; it's circular reasoning. Now, I would prefer that parents come to me and say, "My child doesn't talk," instead of telling me he's aphasiac or dysphasiac. They say to me, "This boy hasn't been able to learn to read, and he's been in school for three years." That has more meaning to me than to say he's dyslexic. I have letters from ophthalmologists and from doctors, "I'm sending you a boy who has strephosymbolia." Now, I'm sure the doctor doesn't know what strephosymbolia means.

MERROW: I don't.

KIRK: It means twisted symbols. It's a term that was used by Samuel T. Orton some years ago to mean twisted symbols in the brain, reversals, and so forth. Now, it's better for them to tell me that the child can't read, and we can't find anything wrong with him physically. And I am for simplicity in diagnosis and referral, rather than all of these terms. We want to be profound. I prefer the more simple words: the child can't spell; he can't talk; he can't read; he seems to be excitable; he doesn't...can't sit in his chair; he's jumping around. You know, give the behavior of the child, cause I can work on the behavior. I can't work on the brain. I may indirectly, but I have to work

on the behavior itself. I have to teach him to read directly. I have to...if he has a visualization problem, I'll use the kinesthetic method; I'll have him study words from memory rather than in isolation. But I would say that remediation fills in the habits that should have been trained at an early age.

BLAIR: Dr. Samuel Kirk of the University of Arizona.

MERROW: One expert told me that the parents of learning disabled children are themselves a special breed: in a word, neurotic. This person had observed, over the years, that parents of learning disabled kids were very different from, say, parents with mentally retarded kids. And it was this expert's hunch that the parental neurotic behavior might be a cause of learning disability. Well, I preserve the expert's anonymity, as requested, but I did ask Dr. Marianne Frostig about the hypothesis.

THE THEORY THAT 'NEUROTIC' PARENTS CAUSE LEARNING DISABILITIES

FROSTIG: I don't like this kind of "statistics." First of all, when one has already a pre-determined idea of what one will find, one finds it. When one has an attitude that developed on top of it, and I don't know who it was, that I will find some neuroticism, then one can already make the people neurotic when one talks to them. But then, what is the chicken and what is the hen. You know when you have a child with learning disability, that is unbelievably disturbing, because you know that kid could, and it can't. You know this kid should, and it doesn't. You know? There is a discrepancy which the parent does not understand. The child who is emotionally disturbed, in addition to having deficits -- which all these children are, because after a while, they wonder about themselves -- give terrible to the parents.

MERROW: So the generalization...

FROSTIG: The generalization is really wrong. And I think these parents need all our support, instead of, as we say such things as, "They're all neurotic."

MERROW: Dr. Marianne Frostig of the Frostig Center in California.

BLAIR: You know John, people listening to this program may do what I sometimes do when I hear about a new disease: start finding the symptoms in themselves.

MERROW: I asked Dr. Sylvia Richardson if there was a danger of your minds playing tricks like that, particularly with learning disabilities, which are pretty slippery to begin with.

WHAT IS AND WHAT IS NOT A LEARNING DISABILITY

RICHARDSON: It's very possible, and it's very common. I had a brain tumor all the way through medical school; my roommate had tuberculosis. You know, we just got the symptoms when we read it. I can't read an article about schizophrenia, because I'm convinced I've got it. We all have many, many symptoms that sound the same way. You have to look for clusters of things, and you have to look for special things. I can give you a very nice example of a lot of confusion that exists, and it's something that I have very strong feelings about. The term hyperactivity. See, that is not a diagnosis; that is not a disease. That is an adjective. And it is relative to the person who uses it; because what is hyperactive to you may not be hyperactive to me at all. And I hate the word in particular, because I'm Italian. Now, I don't want everybody assuming that if you are hyperactive you're brain damaged and all the rest of it. Because if you came to my house when I was growing up, and everybody was together, all at the same time, and everybody was talking at the same time, and jumping up and down, and the hands are going, and everybody's going, you could say, "My God, this is a whole brain injured family!" But, by the same token, I could go into an Anglo-Saxon home and assume they're all dead. All right? So, you know, there are tremendous differences. We have certain expectations for our children. Some mothers expect...we don't know what to ex-

pect when we have children. But, say you're a very quiet, placid mommy, and you want a little cuddle bunny. And you get a kid with very normal, at the upper limits of normal, high intensity, temperamental attributes, a real hum-go-getter who's going to be the salesperson of the year. Well, that mother is going to react very differently to that particular baby, than she would if she found a cuddle bunny.

MERROW: What I deduce from this is that people listening should be careful about drawing conclusions. They're kids may be hyperactive or learning disabled; they should tread slowly and softly.

RICHARDSON: Well yes, for heavens sake, they shouldn't jump to the idea that if...You know, one of the things...you have to weigh many things, I think. I think the parents need to ask themselves a lot of questions. The child who has a real learning disability, ok, doesn't leave much question in the minds of the parents. They know there's something different.

MERROW: It's not a learning problem.

RICHARDSON: That's right. It's not a learning problem, and it's not something that's happened to the child from outside; that it was caused by environmental stresses, and so on, and so forth. If parents aren't sure, or if they have questions, I think they should go for help just to get their minds at ease; because we forget, as parents, that our children don't really hear what we say; they hear how we feel. And if as parents we're fearful, we're worried, a child knows it. I...we see many children whose self-image has been pounded to death. Who have been taken for evaluations here, and evaluations there, and they have been...and they don't know why? All they know...one little guy told me...I said "Why did you come in to see me, Robbie." He says, "I don't know, but I," he says, "my mom says I got to...that my...I got a hole in my brain." But his mother didn't tell him that. That's what he interpreted from all this stuff that had been going on. This is dreadful to have to live with. We expect things of our children that are beyond their capacity to perform; we expect things of our children that we didn't do ourselves. One of the requirements I keep wanting to inflict on my poor patients, is every time they bring a child in who's not doing well in school, I would like for the parents to also bring me their own high school report cards. (Laughter)

MERROW: Dr. Sylvia Richardson of the University of Cincinnati.

BLAIR: She talked about hyperactivity, which is not a learning disability, although some hyperactive kids are also learning disabled.

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MERROW: But learning disabilities and hyperactivity are often lumped together. And next week on OPTIONS IN EDUCATION, we'll be reporting on hyperactivity, and how it's being treated these days.

BLAIR: Also on Part II of this special series on learning disability, how kids are taught, and how teachers are trained...

MERROW: ...plus the relationship between juvenile delinquency and learning disabilities. There's evidence that most juvenile delinquents are learning disabled.

BLAIR: But the reverse isn't true. Most learning disabled kids don't become juvenile delinquents.

MERROW: We hope you'll be with us for Part II.

* * *

STUDENT: In...one...kind of...tiger...the...beginners...tiger...his...he never been tamed...by man. The...tiger is a big...in...cats in the world.

LEWIS: Here's what he just read: Tigers, like lions and leopards, are

a kind of cat. Although they are bigger and wilder than house cats, they are still cats. But the tiger doesn't act very much like a cat. Other cats climb trees, but the tiger doesn't. Most cats don't like to be in water; the tiger doesn't mind water. It jumps right in and catches fish for itself. Most cats can become pets. Even jungle cats, like the lion, can become pets if people tame them when they're still babies. But that doesn't work very well with tigers. In fact, one kind of tiger, the Siberian Tiger, has never been tamed by man. The Siberian Tiger is the biggest and strongest cat in the world. It's much bigger than a lion; it's strong enough to force an elephant to the ground.

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BLAIR: If you want the transcript of the two-part series, it's available for \$1.00. You can get it by writing National Public Radio -- Education, Washington, D.C. 20036. The transcript includes a list of books and articles about learning disability.

MERROW: The two cassettes are available too, for \$10.00.

BLAIR: And everyone who writes us, for whatever reason, gets by return mail a copy of our schedule for the next three months, for free.

MERROW: So, the transcript: \$1.00; the cassettes: \$10.00. And the schedule is free for the asking.

BLAIR: Here's the address again: National Public Radio -- Education, Washington, D.C., 20036. Ask for Programs 113 and 114, "Learning Disabilities."

MERROW: And please, tell us the call letters of your local NPR station.

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STUDENT: I...watched...the...shhark...

TEACHER: You're guessing. Come on. PH says, what?

STUDENT: Sssh...n...

TEACHER: What's the H say. Now the T, come on.

STUDENT: Ccch...

TEACHER: All right. The short U, say.

STUDENT: Uhh...ssh-in.

TEACHER: No, you don't have sssh. You have...What's the H say?

STUDENT: Sssh.

TEACHER: What's the H say, model T. Don't say anything else. Look up here. What's that say? What's that say?

STUDENT: Ccch.

TEACHER: What does this say?

STUDENT: Sssh..

TEACHER: What does that say?

STUDENT: Ccch...

TEACHER: Ok. Short U.

STUDENT: Uhhh...ch-uh.

TEACHER: Good. Chuh...
 STUDENT: Chuh.
 TEACHER: Just keep that in mind. Chuuuuuh...
 STUDENT: Chuuun...
 TEACHER: Chuuuuun-kkk.
 STUDENT: Chunk.
 TEACHER: Beautiful.

* * *

MERROW: Material for this program came in part from Cathy Lewis, station WXXI, Rochester, New York; Barbara Bernhard, station WUNC, Chapel Hill, North Carolina; Diane Rehm, station WAMU, Washington, D.C.; and Tom Colvin in Baltimore, Maryland.

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BLAIR: OPTIONS IN EDUCATION is written and produced by John Merrow. The Associate Producer is Katharine Ferguson. The Assistant Producer is Natalie Iglitz. Technical assistance for this program by Bob Nock, Jim Anderson and Skip Pizzi. I'm Wendy Blair.

* * *

MERROW: I'm John Merrow, and this is NPR -- National Public Radio.

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MUSIC CREDIT: Excerpts from "Concerto For Classic Guitar and Jazz Piano" by Claude Bolling; RCA Red Seal FRL1-0149.

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